



**Castrol is the World Leader in
Coolant, Lube & Hydraulic Oil &
Rust Preventatives!**

Our local Liquid Engineers offer trusted technical, operational and purchasing advice to help you select the most suitable lubricant to tackle the challenges you face.

**Valley Tool now offering Coolant
Tank Cleaning Services!**

**Contact Valley Tool to find the *right product for
your applications.***

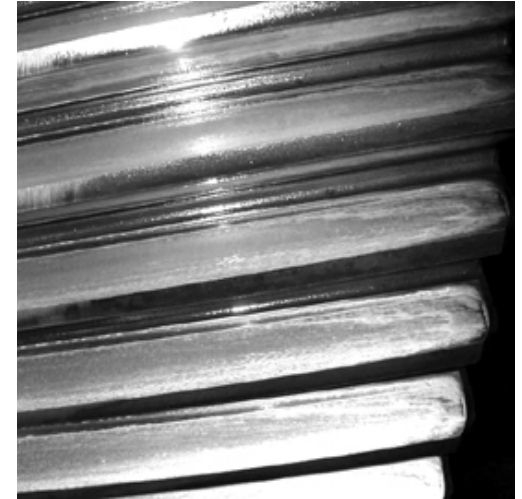
(920) 734-2573 • sales@valleytool.net • www.valleytool.net

AUTOMOTIVE JOB SHOP (USA)

GEAR MANUFACTURING

Castrol Hysol® MB 50

ANNUAL SAVINGS: \$38,380 fluid, \$12,000 tooling



THE SITUATION

Customer had used a premium coolant with much success for years, but recently changed to a lower price-per-gallon fluid from a local blend shop.

Many issues arose with the new coolant that were not problems before the change - tool life, sump life, bacteria, and high usage.

Castrol and our distributor were asked to review the situation and offer an alternative fluid.

BEFORE

- Tool life was only 30 pieces per corner
- Tramp oil issues
- Bacteria issues

AFTER

- Tool life increased to 75 pieces per corner
- Roughing insert life improved by 100% from 1 day to 2 days
- Fluid runs cleaner and separates tramp oil quickly to improve skimmer performance.
- Bacteria tests are always low

THE SOLUTION

- Castrol Hysol MB 50 was brought in to be the right fluid for the wide variety of materials and aggressive tooling in this shop.
- The Castrol team used a 'total cost of ownership' approach to show usage reduction and overall cost savings.
- Tooling studies were done to determine the coolant performance compared to the competitor's baseline.
- The Castrol distributor provided filtration service and equipment to clean out the machine, having it recharged and back into production in under 3 hours.

CASE STUDY

IT'S MORE THAN JUST OIL. IT'S LIQUID ENGINEERING.



FOR CASTROL AND CASTROL CUSTOMER USE ONLY. OTHER USES PROHIBITED. DO NOT FORWARD OR DUPLICATE.

RECOMMENDATIONS

The customer quickly realized that the lower price-per-gallon fluid was actually costing them much more in overall expenditures. The Castrol team recommended a 'total cost of ownership' approach to evaluating metalworking fluid options.

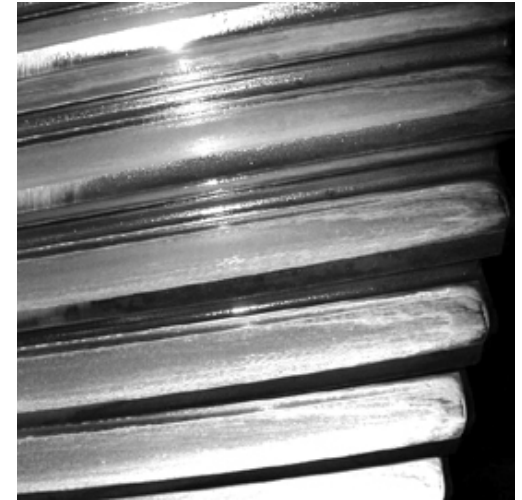
Castrol distributor employed a new service and equipment package to minimize downtime associated with the conversion to Hysol MB 50.

CONCLUSION

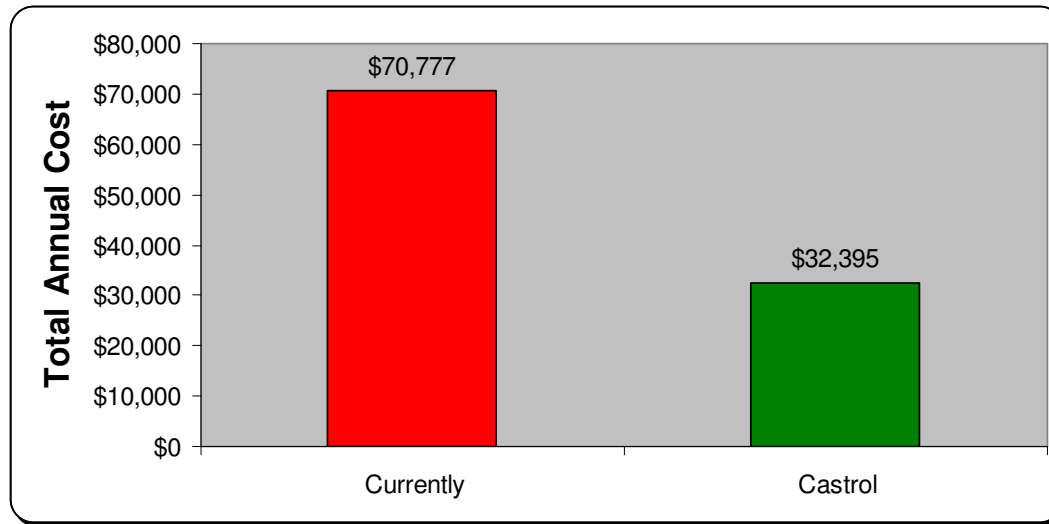
The customer charged an individual machine and collected data to determine which fluid would offer the lowest cost.

The Hysol MB 50 has proved superior in many aspects – tool life, sump life, biological control, cleanliness, operator acceptance, and fluid consumption.

The result was a total savings of over \$50,000.



TOTAL COST COMPARISON



- State-of-the-art equipment and service to facilitate a quick charge-up and trial launch.
- Fluid recommendation based on all aspects of the shop environment.
 - Tooling Applications
 - Materials
 - Operator Acceptance
 - Tramp Oil
- Documentation of cost savings in tool life and fluid.

CASE STUDY

IT'S MORE THAN JUST OIL. IT'S LIQUID ENGINEERING.



Castrol Industrial North America Inc.
150 West Warrenville Rd., 603-1E Naperville, IL 60563
Tel 800 621 2661 Fax 877 648 9801
Email techhelp@castrol.com www.castrol.com/industrial

FOR CASTROL AND CASTROL CUSTOMER USE ONLY. OTHER USES PROHIBITED. DO NOT FORWARD OR DUPLICATE.

Castrol, the Castrol logo and Hysol are trademarks of Castrol Limited, used under license.

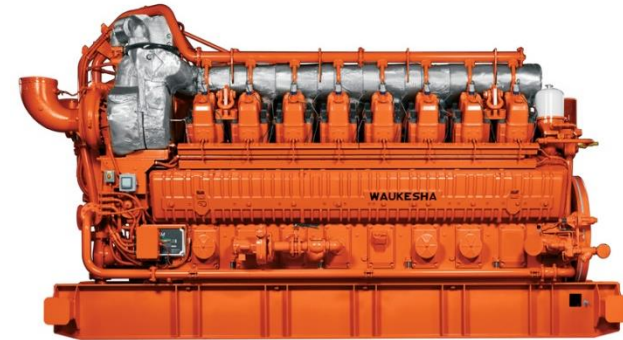
Hysol MB 20 Greatly Reduces Usage

MACHINERY MANUFACTURING (USA)

POWER GENERATION

Castrol Hysol® MB 20

ANNUAL SAVINGS: \$286,915



THE SITUATION

A major power generation engine manufacturer was using 2 coolants from company “H” to machine all the engine components in over 250 machine tools. One coolant was used on the cast iron parts while the other coolant was used on the steel and aluminum parts.

The customer was interested in using 1 coolant and looking for additional savings as a result.

BEFORE

- Two coolants from company “H”
- Separate mixing stations needed for each coolant
- High inventory cost
- Some coolant mixing problems
- **Usage of 1450 – 1700 gal per month**

AFTER

- Hysol MB 20 in use
- Only 1 mixing station needed
- Inventory needs reduced
- No coolant mixing issues
- **Usage of only 450 gal per month average!**

THE SOLUTION

- Hysol MB 20 can machine multiple metal types including all the metals used in this facility (cast iron, 356 aluminum, 4000 series steel).
- Concentrations are varied depending on the operation needs:
 - For cast iron, 5-6% concentration
 - For steel, 7-8% concentration
 - For aluminum, 9-10% due to surface finish requirements.
- Machining operations are milling, drilling, grooving, turning, tapping, honing, and grinding.
- Hysol MB 20 runs very clean, so there are no issues with dirty sumps even when machining cast iron.
- Hysol MB 20 has a very long sump life, allowing for a recycling program to be implemented.

Hysol MB 20 Greatly Reduces Usage

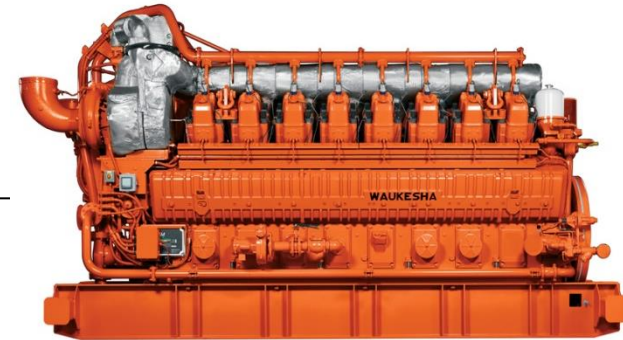
RECOMMENDATIONS

Castrol worked with the customer to implement a recycling program within the facility. Sumps are pumped out every 3-4 months and run through a good filtration system. The fluid is then adjusted to the correct concentration and put back into the plant for use, with no other additives or adjustments necessary. The average monthly usage was lowered by over 65% even though production levels had recently increased near the time of changeover.

Large power generation engines like this one support backup power to places like skyscrapers and hospitals

CONCLUSION

Implementation of Hysol MB 20 throughout the plant has reduced usage dramatically, providing over **\$286,000 in annual savings.**



OTHER POTENTIAL APPLICATIONS

Hysol MB 20 has the ability to machine multiple types of metal in various machining operations, making it an extremely versatile fluid for the manufacturing environment.

Castrol Industrial North America Inc.
150 West Warrenville Rd., 603-1E
Naperville, IL 60563
Tel +1-877-641-1600
Email techhelp@castrol.com
www.castrol.com/industrial

MACHINERY MANUFACTURE (USA)

SMALL ENGINE

Castrol Techniclean S 5001

ANNUAL SAVINGS: \$155,721 USD



THE SITUATION

A small engine manufacturer had been using six different products across two different plants for their cleaning applications.

There were issues around cleaning ability, the complexity of managing the products and the cost of the overall basket of products. The number of different cleaners and disposal issues also led to inefficient operations and manpower problems.

The washers are all spray washers, varying in brand (Proceco, Alliance, etc.), totalling more than 50.

BEFORE CASTROL

- The customer had been using six different cleaners in two plants previously.
- Total gallons used previously: 720 gal /month..

AFTER CASTROL

- Both plants have been consolidated to one cleaner (Castrol Techniclean S 5001).
- Total gallons of cleaner used per month after conversion: 412 gal/ month.

THE SOLUTION

- Trial and implement a single cleaner to run in all of the washers
- Consolidate supply base
- Total annual cleaner usage reduction of 3700 gallons
- Environmental stewardship in net reduction of waste
- **Total savings annually of \$155,721**
 - Cleaner savings of \$51,291
 - Waste savings of \$39,929
 - Labor Efficiencies and savings of \$64,501

CASE STUDY

YOUR ADVANTAGE IN AN INDUSTRIAL WORLD



Castrol Industrial North America Inc.
150 West Warrenville Road, 605-3E Naperville, IL 60563
Tel 877 641 1600 Fax 877 648 9801
Email rdgbinternetfeedbk@bp.com www.castrol.com/industrial

FOR CASTROL AND CASTROL CUSTOMER USE ONLY. OTHER USES PROHIBITED. DO NOT FORWARD OR DUPLICATE.

Castrol, Techniclean, and the Castrol logo are trademarks of Castrol Limited, used under license.